



**Regulatory Advisory: Update
December 16, 2024**

**VARIABLE REFRIGERANT FLOW MINIMUM EFFICIENCY REQUIREMENTS FOR
2022 BUILDING ENERGY EFFICIENCY STANDARDS**

The 2022 Building Energy Efficiency Standards include minimum efficiency requirements for variable refrigerant flow (VRF) air conditioners and heat pumps in Table 110.2-G and Table 110.2-H. The Integrated Energy Efficiency Ratio (IEER) and Energy Efficiency Ratio (EER) efficiency metrics are based on AHRI 1230 test procedures. In 2023, the AHRI 1230 test procedures were updated resulting in changes to IEER and EER efficiency ratings. Additionally, the U.S. Department of Energy (DOE) adopted new minimum IEER efficiency requirements based on the updated AHRI 1230 testing procedures. These DOE minimum IEER efficiency requirements went into effect on January 1, 2024. The updated AHRI 1230 test procedures and DOE minimum IEER efficiency requirements no longer align with the minimum efficiency requirements identified for VRF equipment with cooling capacity greater than or equal to 65,000 Btu/h in Table 110.2-G and Table 110.2-H of the 2022 Building Energy Efficiency Standards.

Prescriptive Compliance Updated Guidance

California Energy Commission (CEC) staff provide the following advisory to authorities having jurisdiction (AHJs) when VRF equipment with cooling capacity greater than or equal to 65,000 Btu/h tested under updated AHRI 1230 testing procedures are used in a building project.

1. Effective January 1, 2024, an AHJ must enforce updated federal minimum efficiency requirements for IEER for all VRF equipment with cooling capacity greater than or equal to 65,000 Btu/h, see 10 CFR 431.97(g)(2) - [https://www.ecfr.gov/current/title-10/part-431#p-431.97\(g\)\(2\)](https://www.ecfr.gov/current/title-10/part-431#p-431.97(g)(2)).
2. Effective January 1, 2024, an AHJ is not required to enforce EER minimum efficiencies identified in Table 110.2-G or Table 110.2-H for all VRF equipment with cooling capacity greater than or equal to 65,000 Btu/h.

Further Information

Questions about this advisory or the Building Energy Efficiency Standards in general may be directed to the Title 24 Hotline at:

800-772-3300, toll-free in California

916-654-5106, outside of California

[Energy Code Hotline Submission Form](https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/energy-code-hotline-submission) - <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/energy-code-hotline-submission>